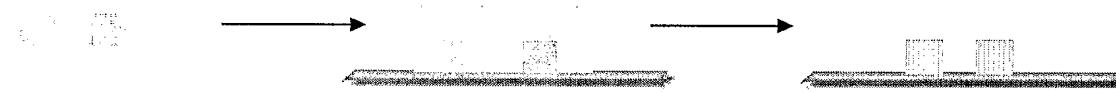
**Fig. 1**

A: μ CP – micro Contact Printing**B: REM – Replica Molding****C: μ TM – micro Transfer Molding****D: MIMIC – Micro Molding in Capillaries****E: SAMIM – Solvent Assisted Micro Molding****Fig. 2**

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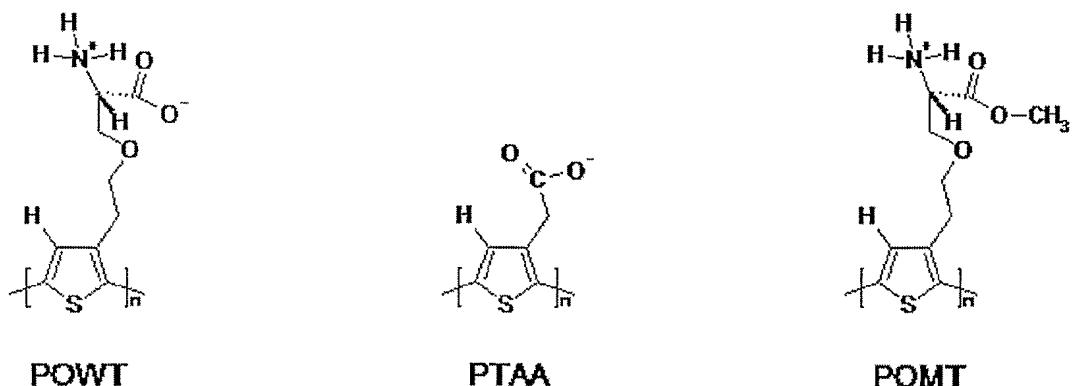


Fig. 3

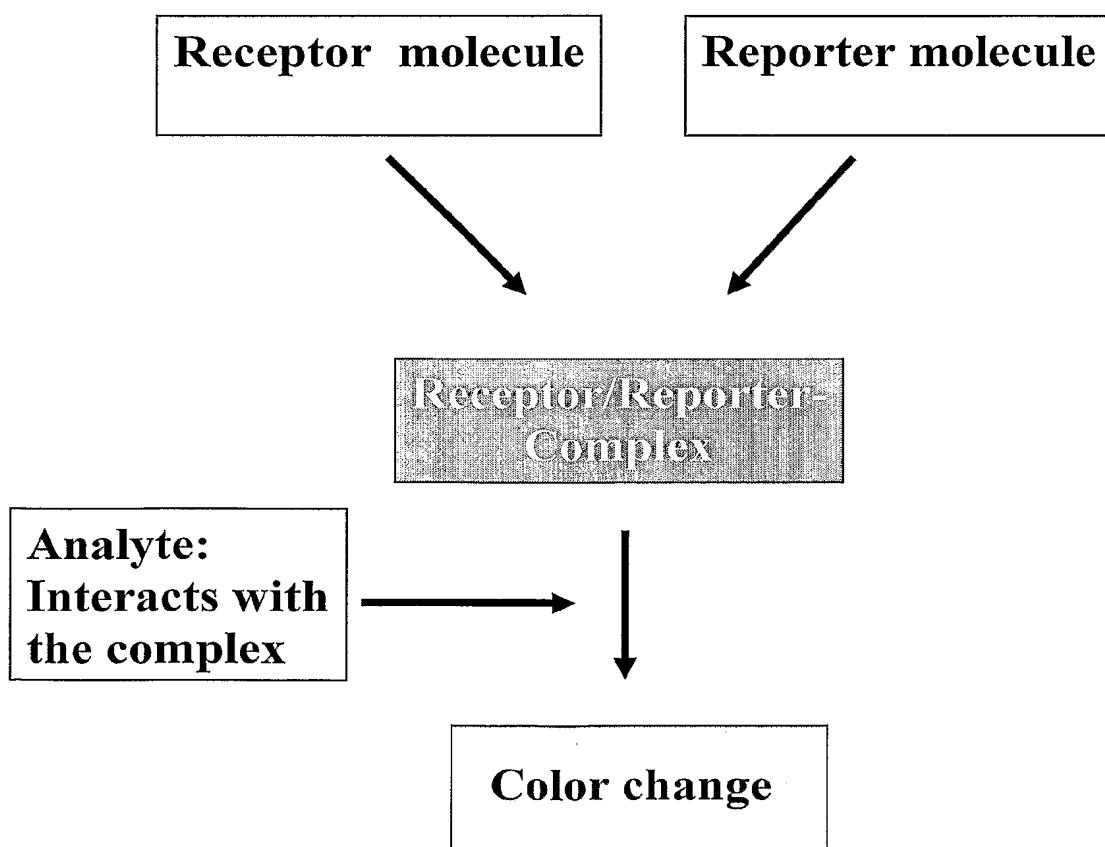


Fig. 4

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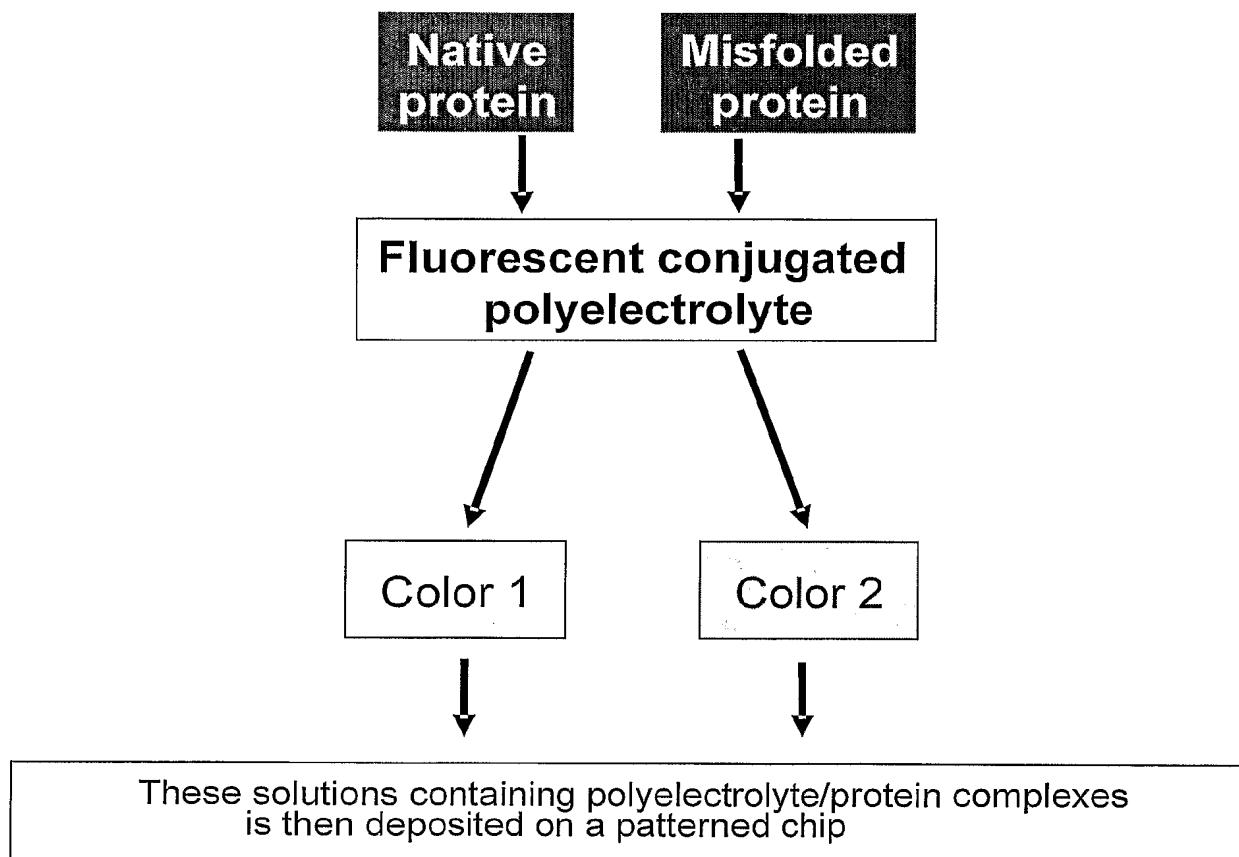
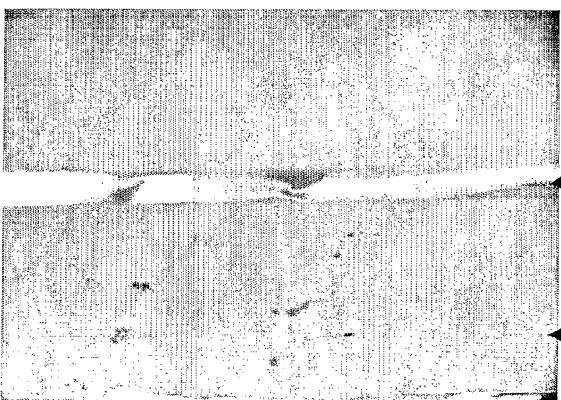


Fig. 5



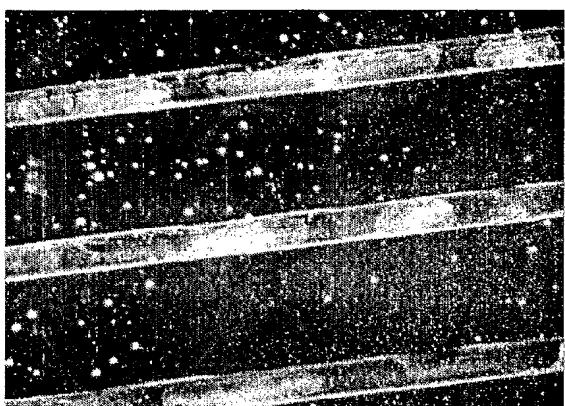
POWT was dissolved in pure water



POWT was dissolved in 20% water/80% methanol

Fig. 6

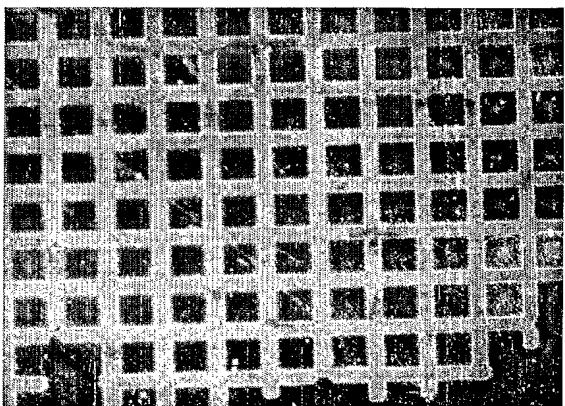
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Hydrophilic area:
POWT/ssDNA complex in phosphate buffer solution stains this area

Hydrophobic area:
POWT/ssDNA complex in phosphate buffer solution does not stain this area particularly good

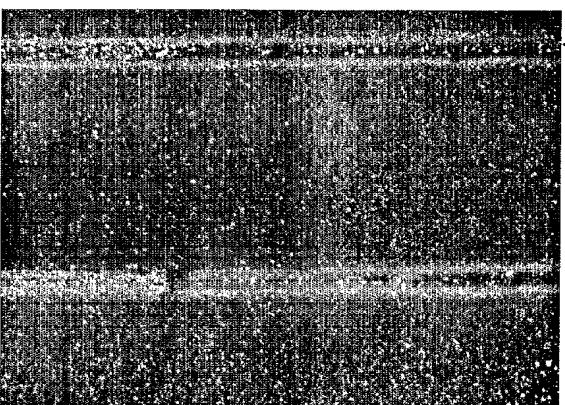
Pattern obtained from POWT/ssDNA-complex dissolved in phosphate buffer.



Same as above but with a different hydrophobic pattern on the hydrophilic substrate.

The squares are hydrophobic and the surrounding area is hydrophilic.

Pattern obtained from POWT/ssDNA-complex dissolved in phosphate buffer.



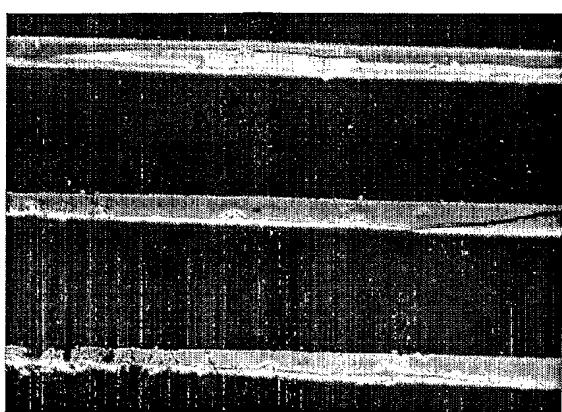
Hydrophilic area:
POWT/dsDNA complex in phosphate buffer solution stains this area

Hydrophobic area:
POWT/dsDNA complex in phosphate buffer solution does not stain this area particularly good

Pattern obtained from POWT/dsDNA-complex dissolved in phosphate buffer.

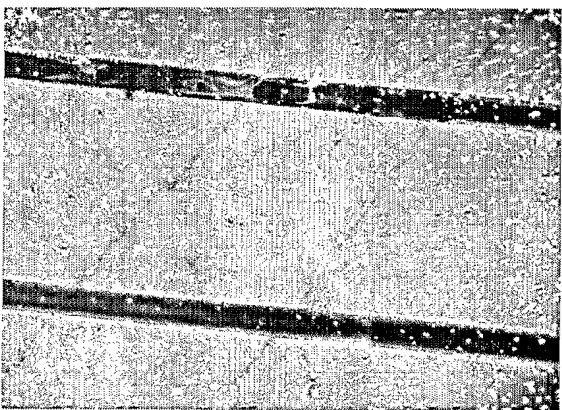
Fig. 7

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Hydrophilic area:
POWT/poly-Glutamic acid complex in phosphate buffer solution stains this area

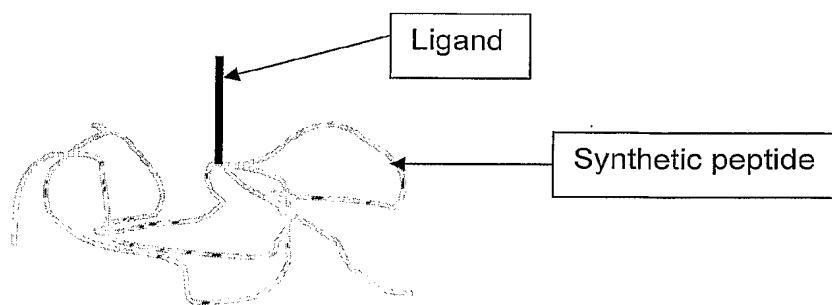
Hydrophobic area:
POWT/poly-Glutamic acid complex in phosphate buffer solution does not stain this area



Hydrophilic area:
POWT/poly-Lysine complex in phosphate buffer solution stains this area

Hydrophobic area:
POWT/poly-Lysine complex in phosphate buffer solution does not stain this area

Fig. 8



These two examples of synthetic peptides can be synthesized with ligands that can bind to a biomolecule of choice.

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**Route B:**

POWT in pure water was coated on a clean substrate and then modified with PDMS stamp with a relief structure. The modified areas that the patterned stamp creates cannot be seen before incubation with a molecule that binds to either area.

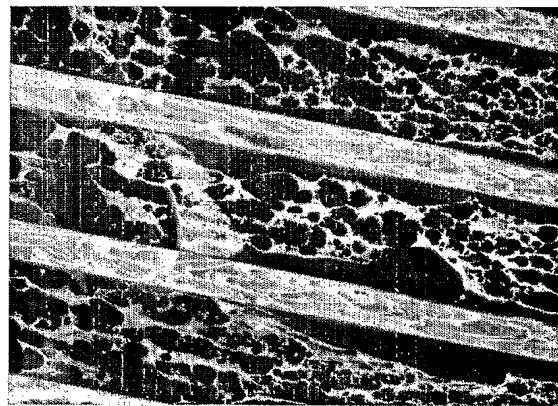
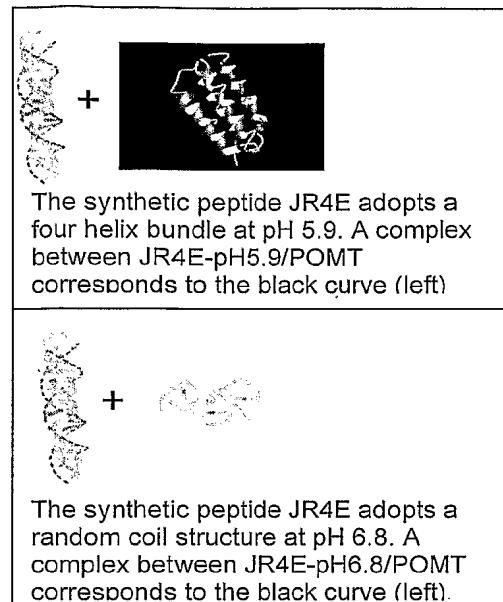
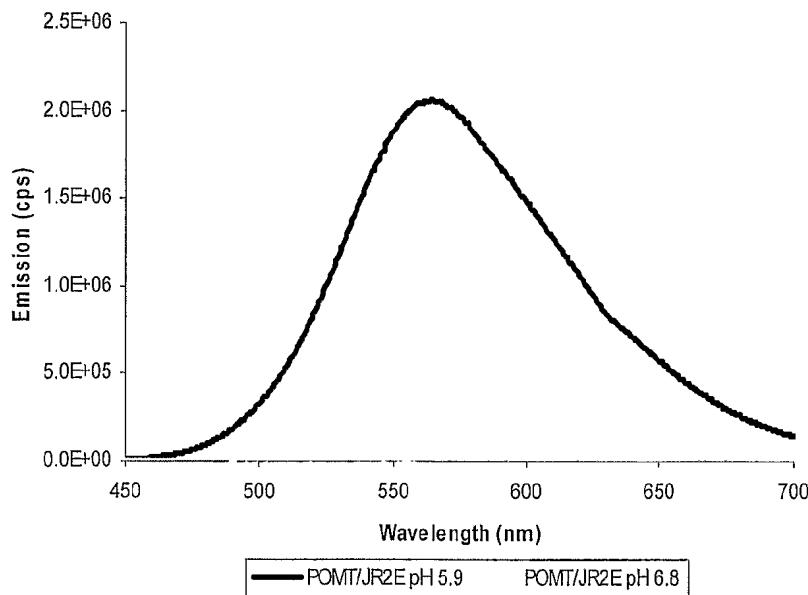


Modified area:
ssDNA in phosphate buffer binds to the modified area

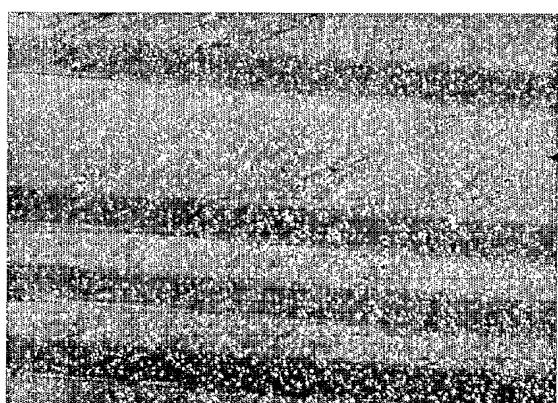
Unmodified area:
ssDNA in phosphate buffer does not bind to this area

Fig. 9

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Hydrophobic area:
POMT/JR4E-pH5.9 complex in phosphate buffer solution does not stain this area

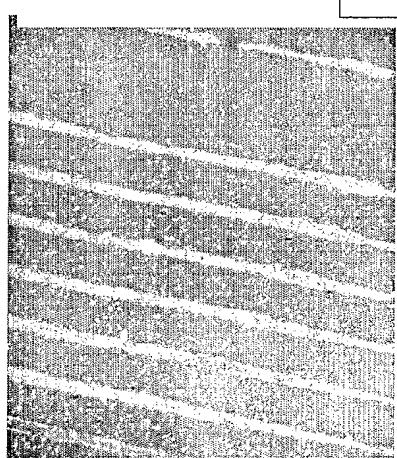
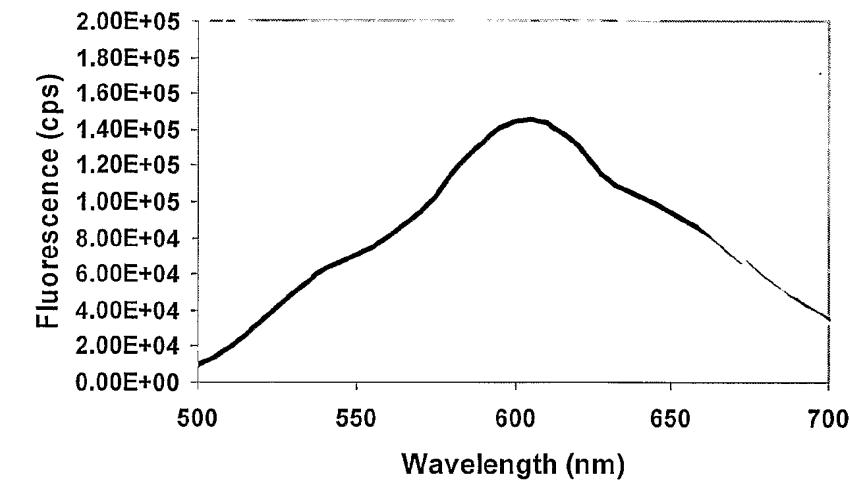


Hydrophobic area:
POMT/JR4E-pH6.8 complex in phosphate buffer solution stains this area in orange color

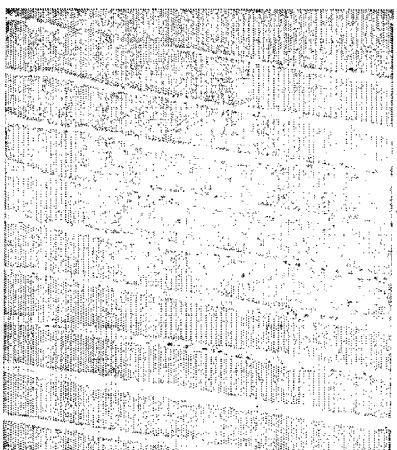
Hydrophilic area:
POMT/JR4E-pH6.8 complex in phosphate buffer solution does not stain this area

Fig. 10

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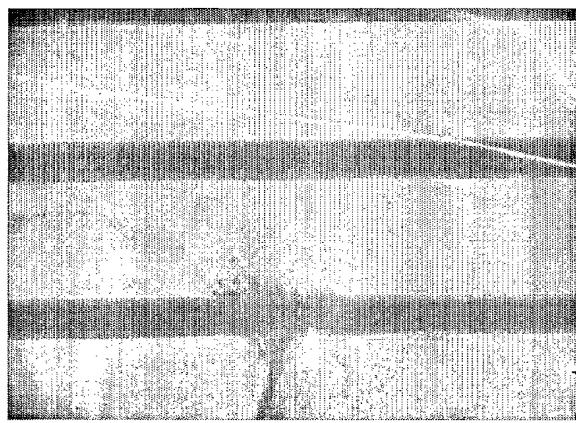
Hydrophobic area:
POWT/CaM complex in phosphate buffer solution stains this area in orange color



Hydrophobic area:
POWT/CaM complex with Ca^{2+} added in phosphate buffer solution stains this area in green color

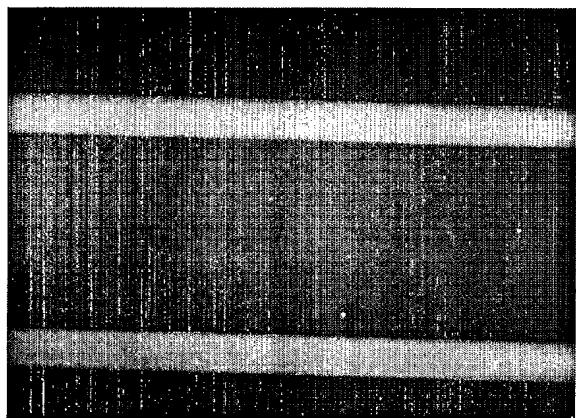
Fig. 11

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Hydrophilic area:
PTAA/Insulin complex in phosphate buffer solution does not stain this area.

Hydrophobic area:
PTAA/Insulin complex in phosphate buffer solution stains this area.



Hydrophilic area:
POMT/Insulin complex in phosphate buffer solution stains this area.

Hydrophobic area:
POMT/Insulin complex in phosphate buffer solution does not stain this area.

Fig. 12